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2. (Original) The method of Claim 1, further comprising converting all non-intensity modulated optical information signals of the WDM signal to intensity modulated signals simultaneously prior to first stage demultiplexing.

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3. (Original) The method of Claim 1, wherein the plurality of non-intensity modulated optical information signals comprise a set of partially demultiplexed signals from the WDM signal.

4. (Currently Amended) The method of Claim 1, wherein the WDM signal includes a minimum channel spacing ~~comprising a multiple of a symbol rate of the WDM signal within 0.4 to 0.6 of an integer that is greater than $(N+0.4)B$ and less than $(N+0.6)B$, where B comprises the symbol rate of the WDM signal and N comprises an integer.~~

5. (Currently Amended) The method of Claim 4, wherein the minimal channel spacing ~~comprising a multiple of the symbol rate within substantially 0.5 of the integer is substantially equal to $(N+0.5)B$, where B comprises the symbol rate of the WDM signal and N comprises an integer.~~

6. (Original) The method of Claim 1, further comprising:
separating the WDM signal into a plurality of partially demultiplexed signals using at least one wavelength interleaver; and
converting non-intensity modulated optical information signals in each set simultaneously using an asymmetric Mach-Zender interferometer.

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10. (Currently Amended) A system for demultiplexing non-intensity modulated wavelength division multiplexed (WDM) signals, comprising:

means for receiving a wavelength division multiplexed (WDM) signal having a plurality of non-intensity modulated optical information signals; and

means for converting a plurality of the non-intensity modulated optical information signals to intensity modulated signals while the plurality of non-intensity modulated optical information signals are multiplexed in at least a portion of the WDM signal using an asymmetric Mach-Zender interferometer comprising a free spectral range coinciding with a channel spacing of the WDM signal or an integer multiple of the channel spacing.

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14. (Original) The system of Claim ~~10~~, further comprising means for converting all non-intensity modulated optical information signals of the WDM signal to intensity modulated signals simultaneously prior to first stage demultiplexing.

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15. (Original) The system of Claim ~~10~~, wherein the plurality of non-intensity modulated optical information signals comprise a set of partially demultiplexed signals from the WDM signal.

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16. (Currently Amended) The system of Claim ~~10~~, wherein the WDM signal includes a minimum channel spacing ~~comprising a multiple of a symbol rate of the WDM signal within 0.4 to 0.6 of an integer~~ that is greater than $(N+0.4)B$ and less than $(N+0.6)B$, where B comprises the symbol rate of the WDM signal and N comprises an integer.

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11 (Currently Amended) The system of Claim *10*, wherein the minimal channel spacing ~~comprising a multiple of the symbol rate within substantially 0.5 of the integer~~ is substantially equal to $(N+0.5)B$, where B comprises the symbol rate of the WDM signal and N comprises an integer.

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(Original) The system of Claim *7*, further comprising:
means for separating the WDM signal into a plurality of partially demultiplexed signals using at least one wavelength interleaver; and
means for converting non-intensity modulated optical information signals in each set simultaneously using an asymmetric Mach-Zender interferometer.

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~~19.~~ (Currently Amended) A demultiplexer for an optical receiver, comprising:
a ~~format converter~~ an asymmetric Mach-Zender interferometer operable to receive a wavelength division multiplexed (WDM) signal having a plurality of non-intensity modulated optical information signals and to convert the non-intensity modulated optical information signals to intensity modulated optical information signals while multiplexed in the WDM signal, the interferometer comprising a free spectral range coinciding with a channel spacing of the WDM signal or an integer multiple of the channel spacing; and

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a plurality of demultiplexing elements each operable to separate a received set of intensity modulated optical information signals into a plurality of signals each having at least one intensity modulated optical information signal.

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~~14~~ 21. (Original) The demultiplexer of Claim ~~20~~, wherein the demultiplex elements comprise Mach-Zender interferometers.